GRUNDIG SERVICE MANUAL

Service Manual

Sach-Nr./Part No.
72010-015.50

Zusätzlich erforderliche Unterlagen für den Komplettservice:

Additionally required Service Manuals for the Complete Service:

Service Manual

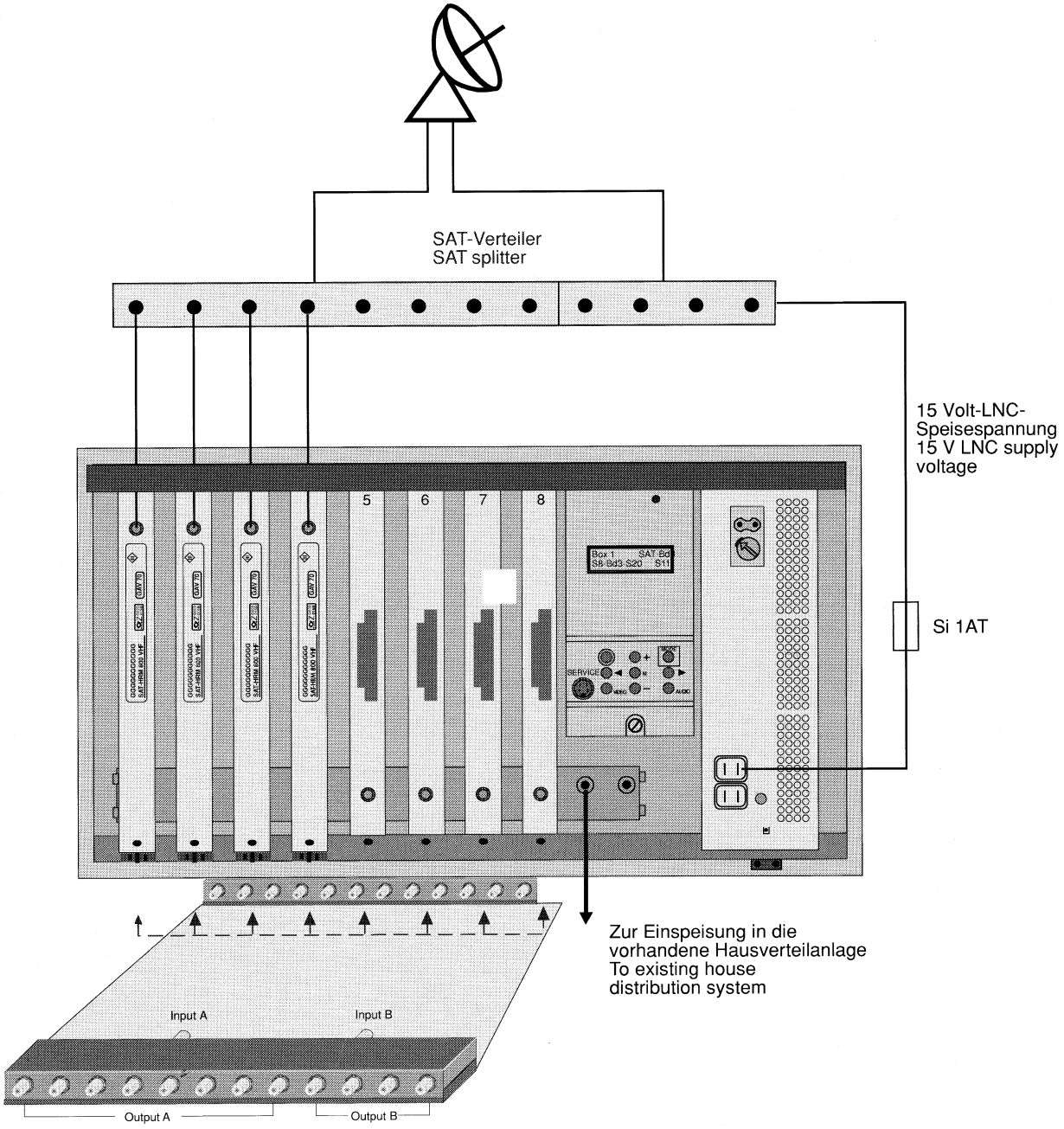
Sicherheit
Safety

Sach-Nr./Part No.
72010-800.00

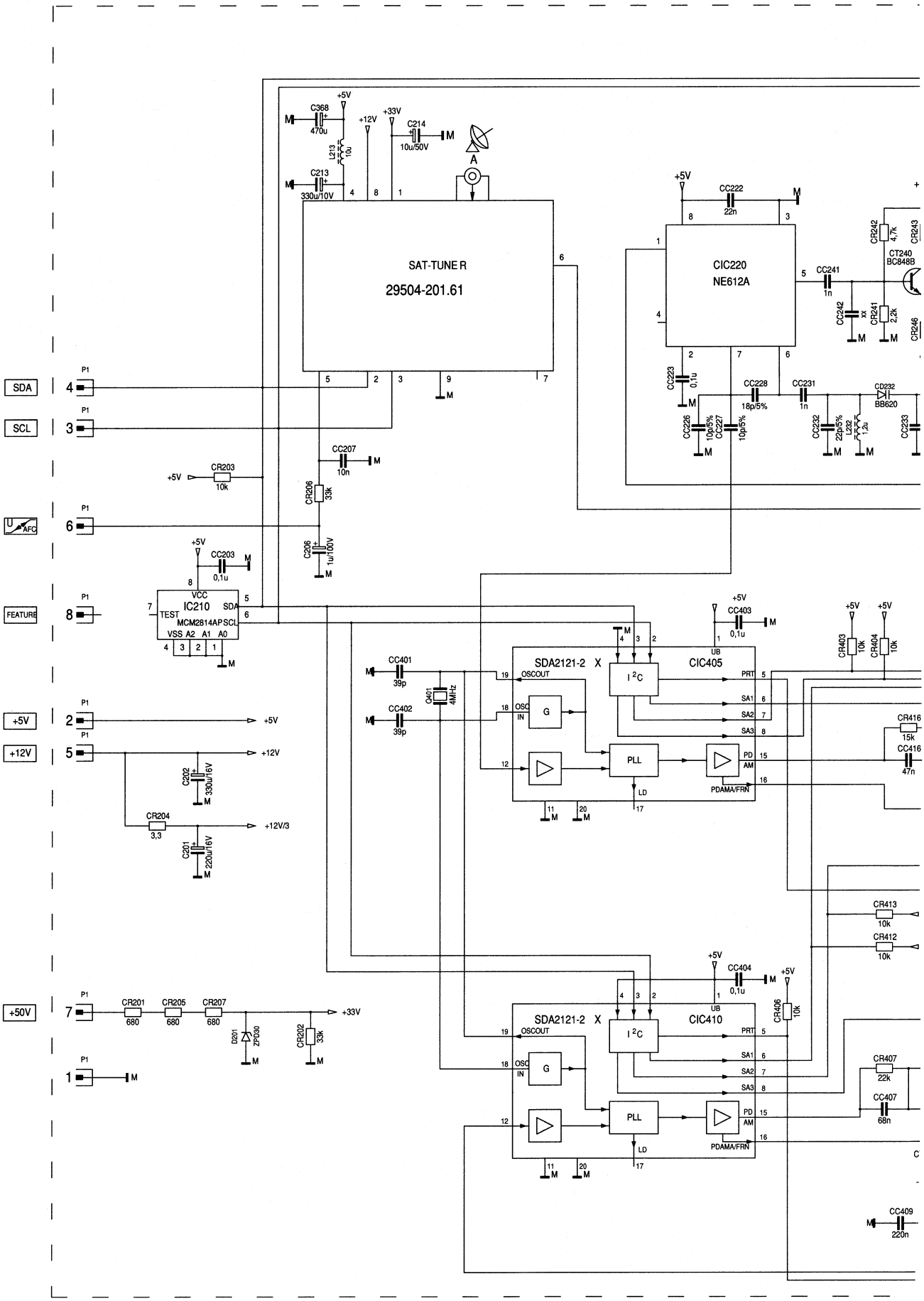
Ⓓ Btx * 32700 #

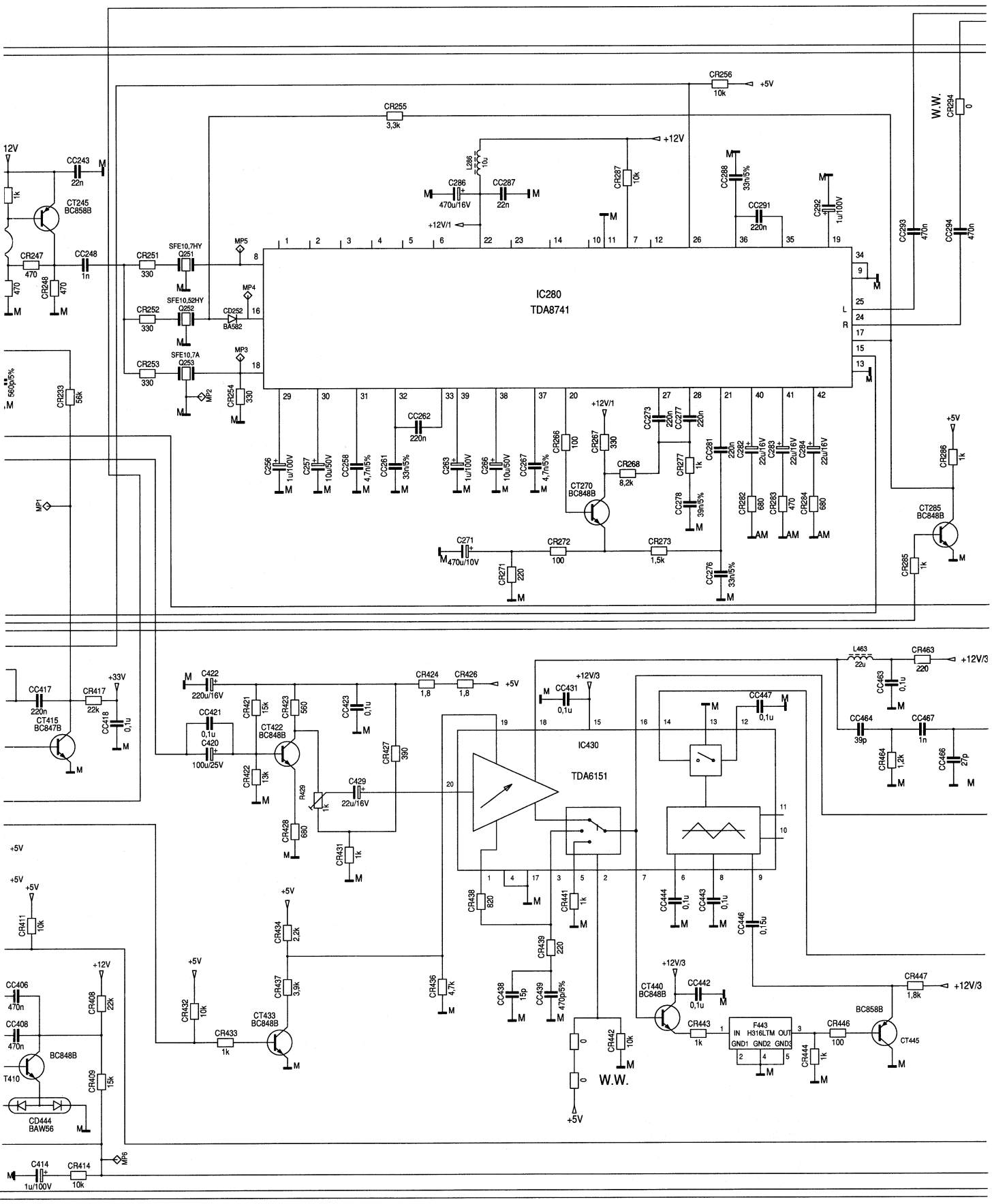
STC 800/0
STC 850

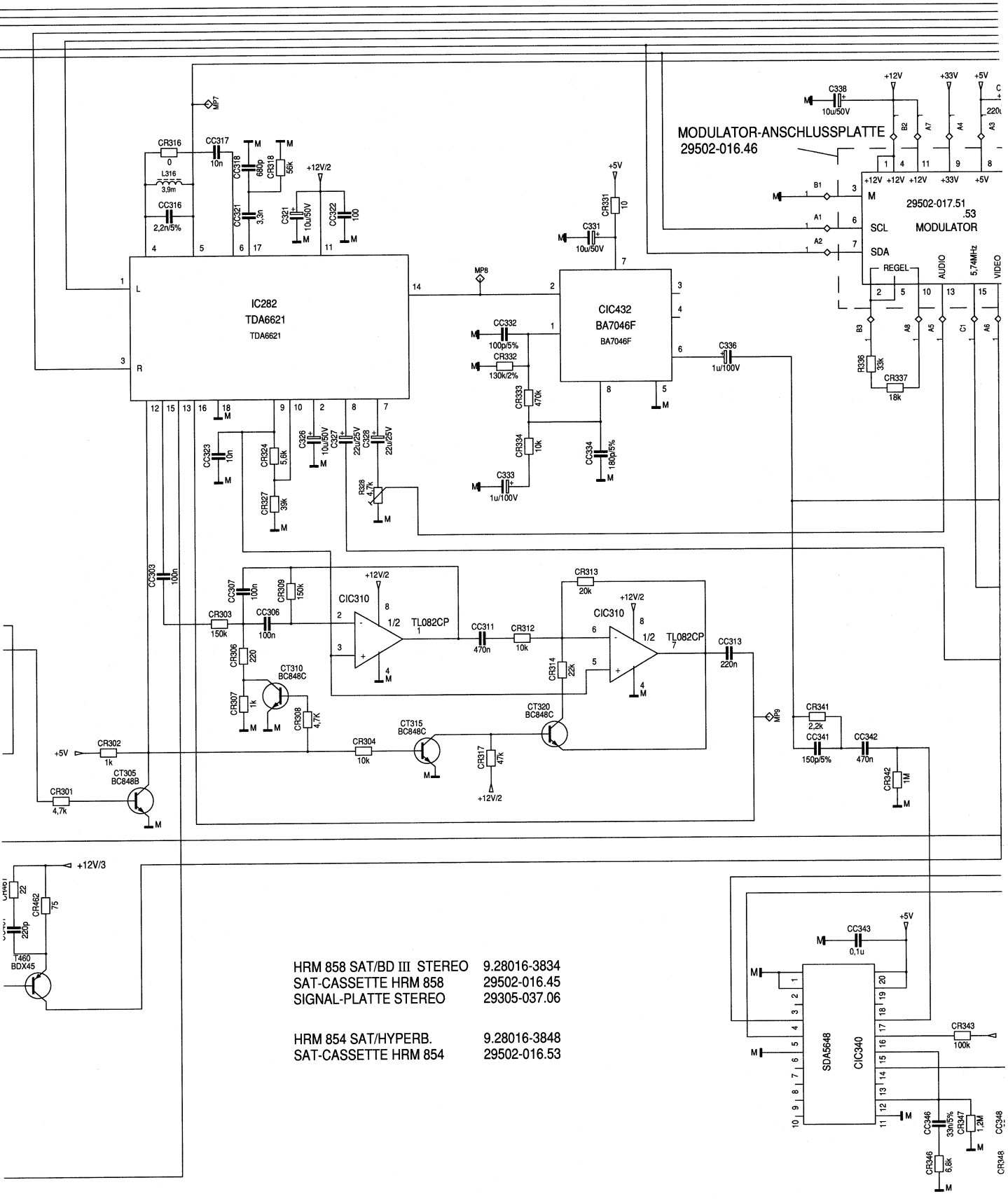
HRM 851 SAT/Bd. I	(9.28016-3837 / GAX 9600)	**HRM 855 SAT/OIRT**	(9.28016-3839 / GAX 9800)
HRM 852 SAT/UHF	(9.28016-3838 / GAX 9700)	**HRM 857 SAT/UHF-OIRT**	(9.28016-3840 / GAY 0100)
HRM 853 FR SAT/UHF	(9.28016-3835 / GAX 8800)	**HRM 858 A SAT/Bd. III-Stereo**	(9.28016-3849 / GAY 4200)
HRM 854 SAT/Hyperb.-Stereo	(9.28016-3848 / GAY 4100)	**HRM 859 SAT/Bd. I-OIRT**	(9.28016-3841 / GAY 0200)



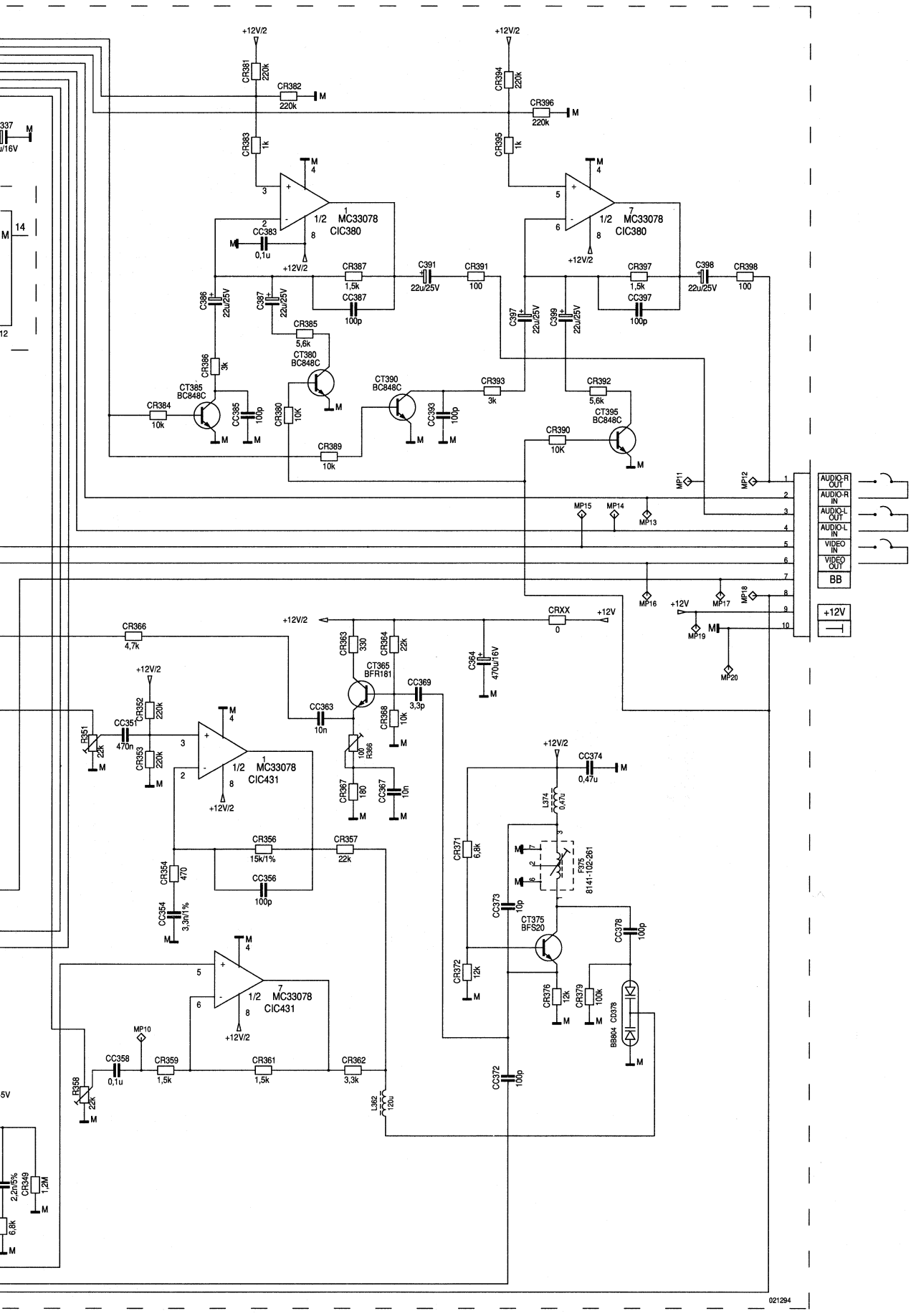
SAT-Cassette



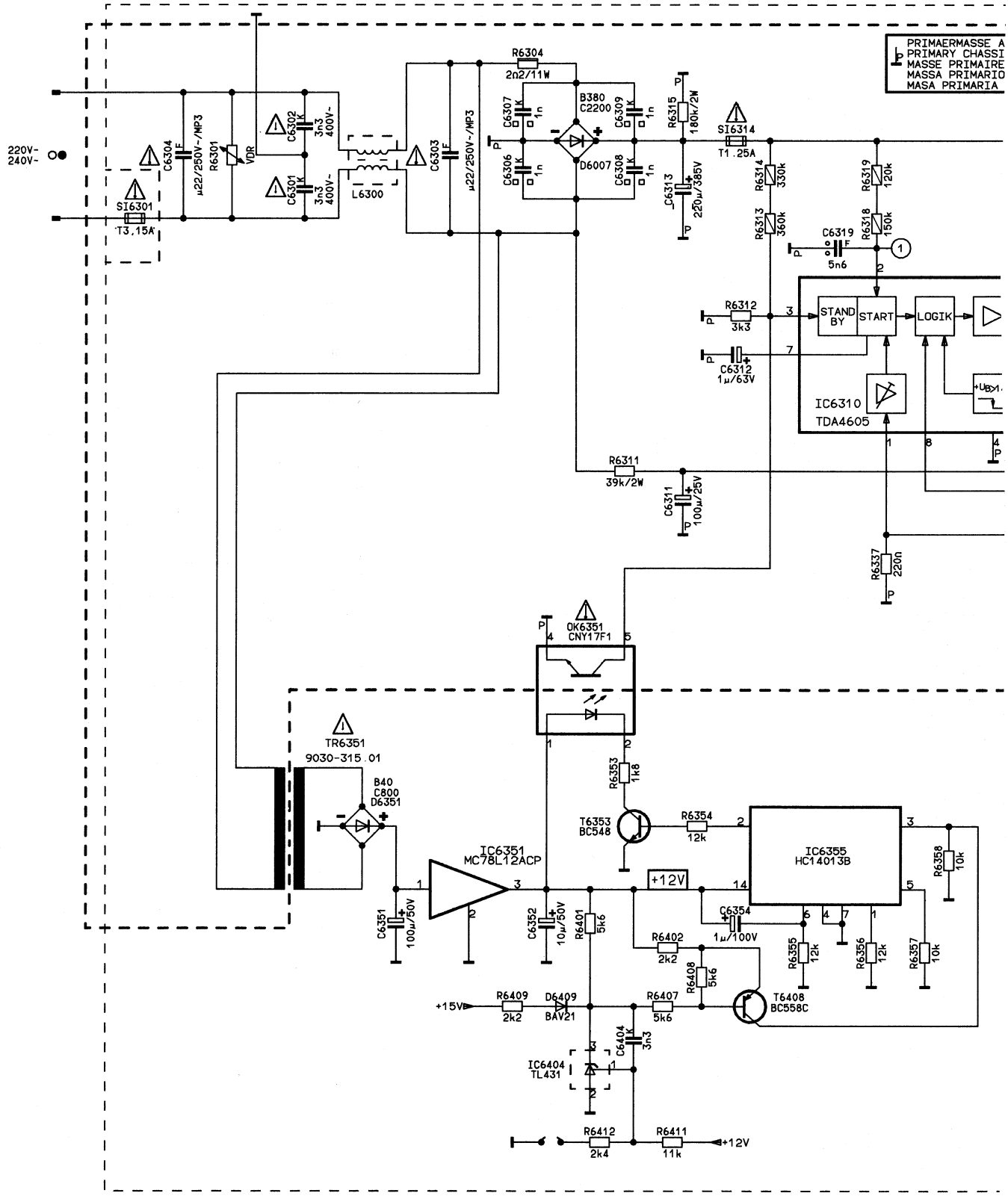

IC280
TDA8741
IC430
TDA6151
CR256 10k +5V
CR255 3,3k
+12V
+12V/1
CC243 22n
CT245 BC858B
CR247 470
CC248 1n
CR248 470
CR251 330
CR252 330
CR253 330
SFE10,7HY Q251
SFE10,52HY Q252
SFE10,7A Q253
CD252 BA582
MP1
MP2
MP3
MP4
MP5
CR233 56k
CR254 330
C256 1u/100V
C257 10u/50V
CC258 4,7n/5%
CC261 33n/5%
CC262 220n
C263 1u/100V
C266 10u/50V
C267 4,7n/5%
CR266 100
CR267 330
CR268 8,2k
CT270 BC848B
CC273 220n
CC277 220n
CR277 1k
CC278 39n/5%
CC281 220n
CC282 220n
C282 22u/16V
C283 22u/16V
C284 22u/16V
CR282 680
CR283 470
CR284 680
C271 470u/10V
CR271 220
CR272 100
CR273 1,5k
CC276 33n/5%
L286 10u
C286 470u/16V
CC287 22n
CR287 10k
CC288 33n/5%
CC291 220n
C292 1u/100V
CC293 470n
CC294 470n
W.W. CR294 0
+5V CR286 1k
CT285 BC848B
CR285 1k
CC417 220n
CT415 BC847B
CR417 22k
+33V
CC418 0,1u
C422 220u/16V
CC421 0,1u
C420 100u/25V
CR421 15k
CR422 13k
CR423 560
CC423 0,1u
CT422 BC848B
CR424 1,8
CR426 1,8
CR427 390
C429 22u/16V
R429 1k
CR428 680
CR431 1k
C431 0,1u
+12V/3
L463 22u
CR463 220
CC463 0,1u
CC464 39p
CR464 1,2k
CC467 1n
CC466 2?p
CC447 0,1u
CC438 820
CR441 1k
CC444 0,1u
CC443 0,1u
CC446 0,15u
CR439 220
CC438 15p
CC439 470p/5%
CR436 4,7k
CR442 10k
W.W.
CT440 BC848B
CC442 0,1u
CR443 1k
F443 IN H316LTM OUT GND1 GND2 GND3
CR446 100
BC858B CT445
CR444 1k
CR447 1,8k
CR411 10k
CR434 2,2k
CR437 3,9k
CR432 10k
CR433 1k
CT433 BC848B
CC406 470n
CC408 470n
CR408 22k
CR409 15k
T410 BC848B
CD444 BAW56
C414 1u/100V
CR414 10k
MP6

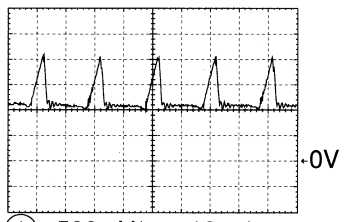


HRM 858 SAT/BD III STEREO	9.28016-3834
SAT-CASSETTE HRM 858	29502-016.45
SIGNAL-PLATTE STEREO	29305-037.06
HRM 854 SAT/HYPERB.	9.28016-3848
SAT-CASSETTE HRM 854	29502-016.53

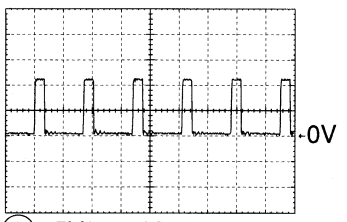

+12V/2
CR381 220k
CR382 220k
CR383 1k
CR394 220k
CR396 220k
CR395 1k
1/2 MC33078 CIC380
CC383 0,1u
CR387 1,5k
CC387 100p
C391 22u/25V
CR391 100
CR397 1,5k
CC397 100p
C398 22u/25V
CR398 100
C386 22u/25V
C387 22u/25V
C397 22u/25V
C399 22u/25V
CR385 5,6k
CR386 3k
CT380 BC848C
CT385 BC848C
CT390 BC848C
CT395 BC848C
CR384 10k
CC385 100p
CR380 10K
CC393 100p
CR393 3k
CR392 5,6k
CR390 10K
CR389 10k
MP11
MP12
MP15
MP14
MP13
MP16
MP17
MP18
MP19
MP20
AUDIO-R OUT
AUDIO-R IN
AUDIO-L OUT
AUDIO-L IN
VIDEO IN
VIDEO OUT
BB
+12V
CRXX 0
CR366 4,7k
CR363 330
CR364 22k
CT365 BFR181
CC369 3,3p
C364 470u/16V
CC363 10n
CR368 10k
R366 100
CR367 180
CC367 10n
CR352 220k
CC351 470n
CR353 220k
R351 22k
1/2 MC33078 CIC431
CC374 0,47u
L374 0,47u
F375 8141-102-261
CR371 6,8k
CC373 10p
CT375 BFS20
CC378 100p
CR372 12k
CR376 12k
CR379 100k
BB804 CD378
CR356 15k/1%
CR357 22k
CR354 470
CC354 3,3n/1%
CC356 100p
CC372 100p
MP10
CC358 0,1u
CR359 1,5k
CR361 1,5k
CR362 3,3k
R358 22k
L382 120u
CR349 1,2M
2,2n/5%
6,8k
021294

Netzteil / Mains Section

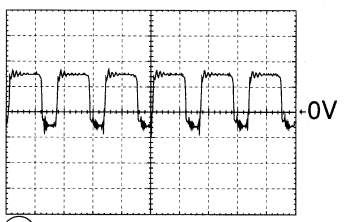




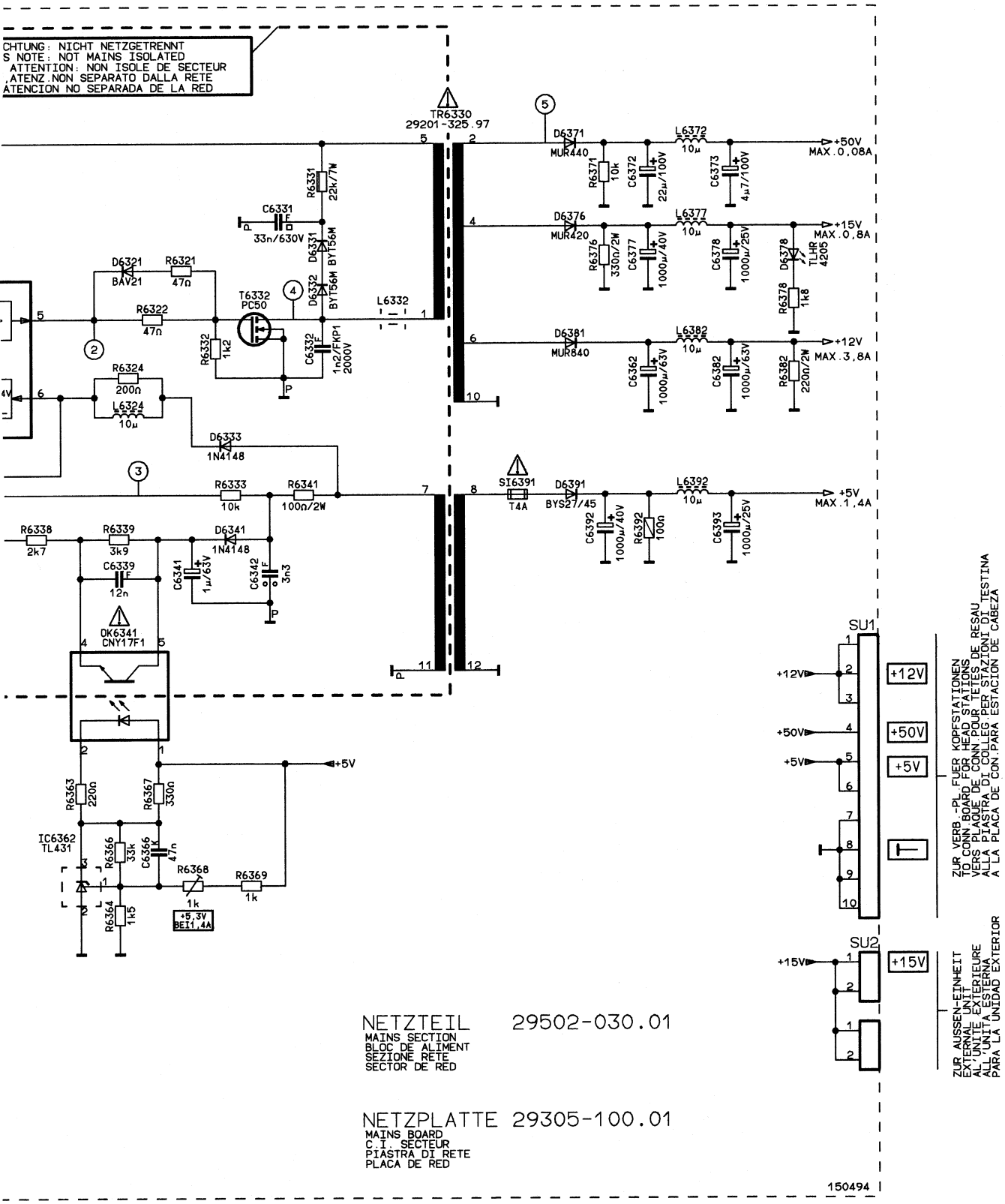
① 500mV/cm, 10µs/cm

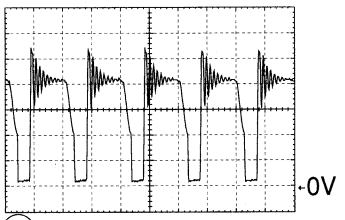


② 5V/cm, 10µs/cm

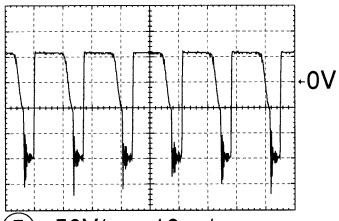


③ 500mV/cm, 10µs/cm



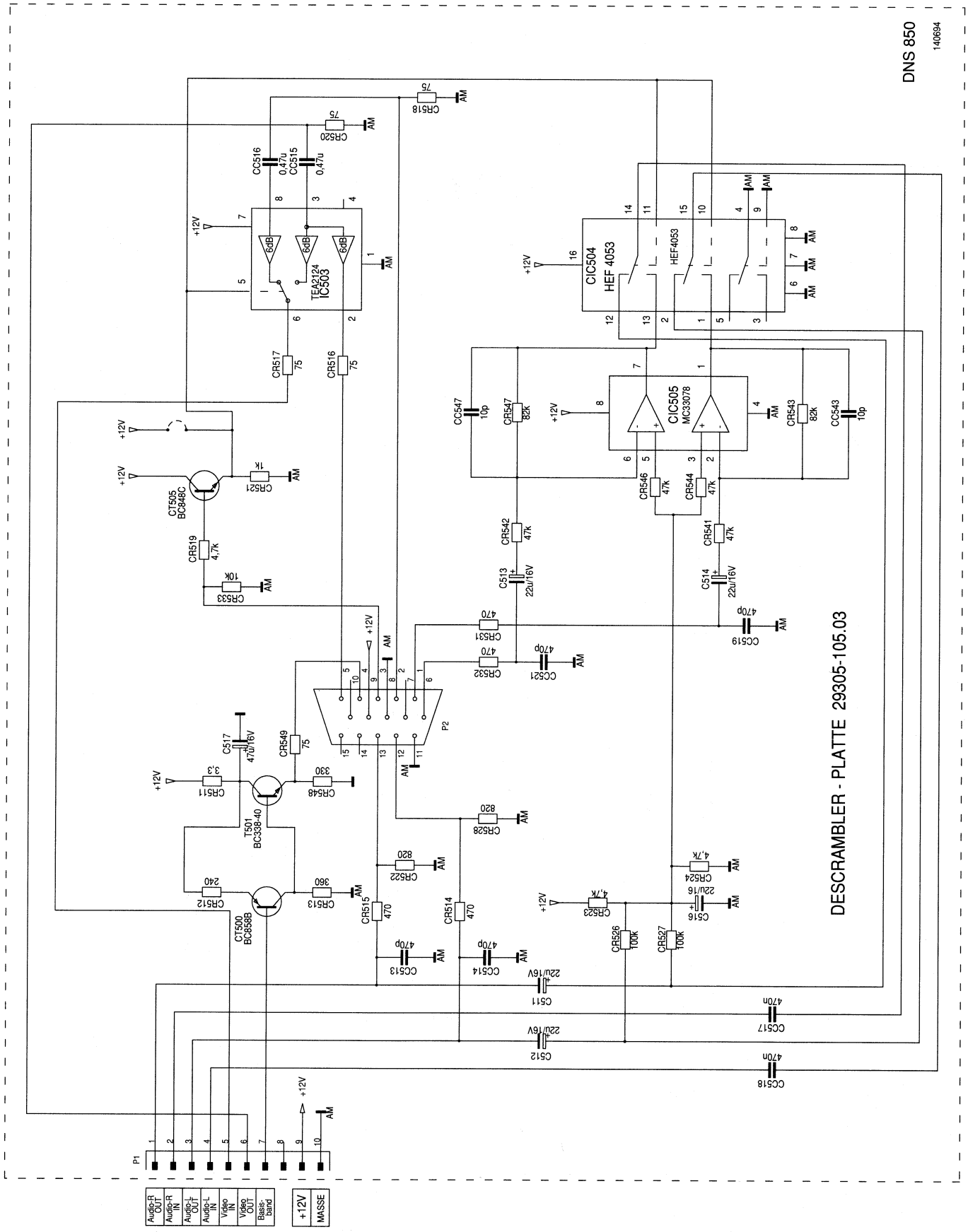


④ 100V/cm, 10µs/cm



⑤ 50V/cm, 10µs/cm

Descrambler-Platte / Descrambler Board



Montageanleitung Descramblernachrüstsatz DNS 850

Der DNS 850 dient zur Nachrüstung der Sat-Cassetten HRM 858, 858A, 851, 853, 854, 855, 857 und 859 der Kopfstationen STC 850, STC 800/0, STC 2400, CT 800 mit einer 15-poligen Submin-D-Descrambler-Anschlußbuchse.

An diese Buchse können angeschlossen werden

- lizensierte Decoder/Descrambler z.B. Videocrypt
- D2-MAC Decoder z.B. Eurocrypt
- Videorecorder für Videoprogramm-Einspeisung
- Videokamera (z.B. für Kinderspielplatzüberwachung)

Über den Schaltspannungseingang Pin 3 der Decoderbuchse kann durch Anlegen einer 12 V-Spannung der Decoder in den Signalweg geschaltet werden. Dazu ist im Stecker Pin 9 (Schaltspannung 12 V/10 mA) mit Pin 3 zu verbinden.
Manche Decoder erzeugen selbst diese Spannung und schalten sich automatisch in den Signalweg.

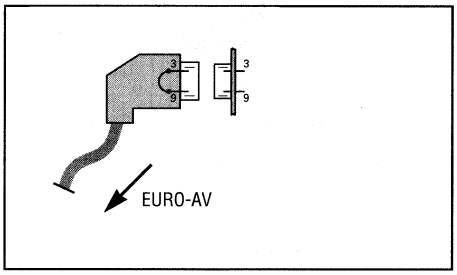
Fitting Instructions for DNS 850 Descrambler Retrofit Kit

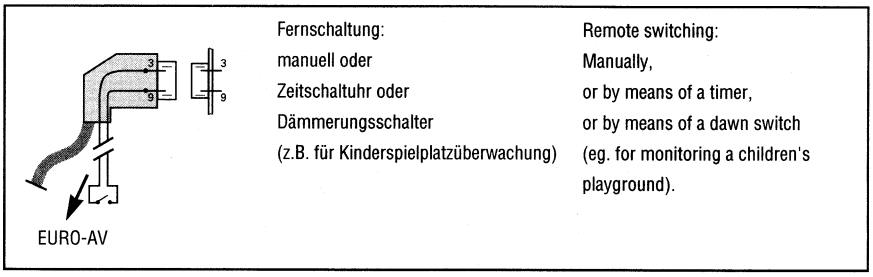
The DNS 850 C is used to retrofit the SAT cassettes HRM 858, 858A, 851, 852, 853, 854, 855, 857, 859 of the head stations STC 850, STC 800/0, STC 2400, CT 800 with a 15-contact Submin-D descrambler connecting socket.

It is possible to connect to this socket:

- a licensed decoder/descrambler; eg. Videocrypt
- a D2-MAC decoder; eg. Eurocrypt
- a video recorder for feeding in video programmes.
- a video camera (eg. for monitoring a children's playground).

It is possible to switch the decoder into the signal path by applying a 12 V voltage to the the switching voltage input Pin 3 of the decoder socket. For this, connect Pin 9 (switching voltage 12 V/10 mA) with Pin 3 in the plug.
Some decoders automatically generate this voltage and switch themselves into the signal path.





Montageanleitung:

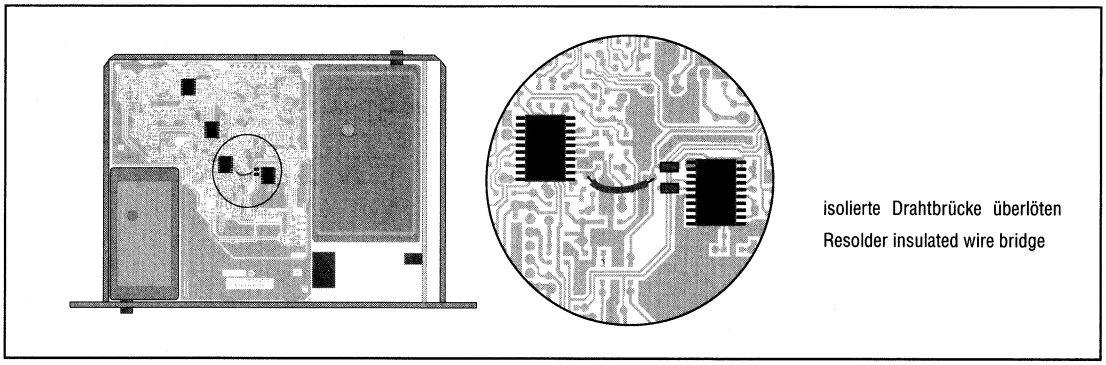
- Silberne Klebefolie vom Buchsendurchbruch an der Gehäusevorderseite entfernen.
- Beide Cassettendeckel abnehmen.
- Descrambler-Modul in den Durchbruch einsetzen und nur mit den beiliegenden Schrauben befestigen.
  Zahn- und Beilagscheibe nicht verwenden!
- Auf der Chassisplatte befindet sich das Steckerunterteil P2 zum Anschluß des DNS 850 C. Entfernen Sie vor dem Aufstecken des Flachbandkabels mit einer Pinzette die 3 Kurzschlußbrücken.

*) Im Auslieferungszustand ist das Basisbandsignal mit PAL-Deemphasis eingestellt. Wird eine lineare Deemphasis benötigt, so muß auf der Cassetten – Hauptplatine eine Überlötung hergestellt werden (siehe Skizze). Lineare Deemphasis wird meist bei D2-MAC Decodern benötigt.

Fitting instructions

- Remove the silver adhesive film from the socket cutout on the front of the cabinet.
- Remove both cassette covers.
- Insert the descrambler module into the cutout and fasten it with the screws supplied.
  Do not use the tooth lock washer and shim!
- On the chassis board, the connector P2 to connect the DNS 850 C is provided. Before connecting the flat cable, remove the 3 jumpers by means of a pair of tweezers.

*) At the factory, the baseband signal with PAL deemphasis has been preset. If a linear deemphasis is required, a wire bridge on the cassette motherboard must be resoldered (see figure). A linear deemphasis is normally required for D2-MAC decoders.



GRUNDIG Ersatzteilliste Spare Parts List

Ⓓ Btx * 32700 #

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NETZTEIL - KOPFSTATION
MAINS SUPPLY - HEAD STATION

ERSETZT AUSGABE 3/92
SUBSTITUTE EDITION 3/92

SACH-NR. / PART NO.:29502-030.01

POS. NR. POS. NO.	ABB. NR. FIG. NO.	SACHNUMMER PART NUMBER	ANZ. QUA.	BEZEICHNUNG Ⓓ	DESCRIPTION GB
0001.000	⚠	29303-376.11		EINBAUSTECKER	BUILT-IN PLUG
0002.000		29303-173.01	2	ANSCHLUSS-BUCHSE	CONNECTION SOCKET
0003.000		29303-174.01	2	FLACH-STECKER	PLUG
0004.000		29303-153.01		MONTAGECLIP T6332	ASSEMBLY CLIP
0005.000		29303-153.12		MONTAGECLIP D6381	ASSEMBLY CLIP
0006.000		29303-156.07		GLIMMERSCHEIBE D6381	MICA LAMINATION
0007.000		29303-156.18		FOLIE (WAERMELEITEND) T6332	FOIL (THERMAL CONDUCTING)

POS. NR. POS. NO.	SACHNUMMER PART NUMBER	BEZEICHNUNG Ⓓ DESCRIPTION GB
C 6301 ⚠	8660-098-241	SI-KERKO B-SS 3300PF 20% 400V
C 6302 ⚠	8660-098-241	SI-KERKO B-SS 3300PF 20% 400V
C 6303 ⚠	8511-793-033	MP 3 0,22 UF 20% 250VW
C 6304 ⚠	8511-793-033	MP 3 0,22 UF 20% 250VW
C 6332 ⚠	8515-911-054	KF 90 1200PF 5% 2000V
C 6362	8451-997-028	ELKO 20 1000UF 63V
C 6377	8452-097-028	ELKO 14 1000UF 40V
C 6378	8452-097-016	ELKO 12 1000UF 25V
C 6382	8451-997-028	ELKO 20 1000UF 63V
C 6392	8452-097-028	ELKO 14 1000UF 40V
C 6393	8452-097-016	ELKO 12 1000UF 25V
D 3602	8309-720-333	Z DIODE 33 C 0,5W
D 3608	8309-215-045	DIODE 1 N 4148
D 3614	8309-215-104	DIODE 1 N 4002 -GA
D 3622	8309-215-104	DIODE 1 N 4002 -GA
D 3626	8309-215-104	DIODE 1 N 4002 -GA
D 3632	8309-215-104	DIODE 1 N 4002 -GA
D 3646	8309-215-104	DIODE 1 N 4002 -GA
D 3647	8309-215-104	DIODE 1 N 4002 -GA
D 3662	8309-215-104	DIODE 1 N 4002 -GA
D 6307	8308-560-520	GLR.B 380 C 3700/2200
D 6331	8309-517-097	DIODE BYT 56 M RA TFK
D 6332	8309-517-097	DIODE BYT 56 M RA TFK
D 6351	8308-524-050	GLR.B 40 C 500 SI/SI-M GI
D 6371	8309-820-440	DIODE MUR 440
D 6376	8309-820-420	DIODE MUR 420
D 6378	8309-921-205	LE DIODE TLHR 4213 R,S,T, BETRIEBSANZEIGE
D 6381	8309-820-840	DIODE MUR 840/BYV 29-400/
D 6391	8309-518-027	DIODE BYS 27/45
IC 6310	8305-334-605	IC TDA 4605 SIE
IC 6355	8305-201-413	IC 4013 B/14013 B CP (C-MOS)

POS. NR. POS. NO.	SACHNUMMER PART NUMBER	BEZEICHNUNG Ⓓ DESCRIPTION GB
L 6300 ⚠	29500-812.97	FUNKENTSTOERDROSSEL
L 6324	8140-526-502	DR AX 0411-GA 15UH
L 6332	09278-314.07	FERRITDROSSEL
L 6372	09241-059.51	STABKERNDROSSEL 10UH
L 6377	09241-059.51	STABKERNDROSSEL 10UH
L 6382	09241-059.51	STABKERNDROSSEL 10UH
L 6392	09241-059.51	STABKERNDROSSEL 10UH
OK6341 ⚠	8306-000-012	OPTOKOPPLER CNY 17 F1
OK6351 ⚠	8306-000-012	OPTOKOPPLER CNY 17 F1
R 3621	8700-007-476	KSW AX 0207-GA 1,3 KOHM
R 3631	8700-007-476	KSW AX 0207-GA 1,3 KOHM
R 6301	8311-402-275	VDR SIOV-S20 K275 SIE
R 6304	8730-109-013	DRW 11 AX 2,2 OHM 5% V3
R 6331	8750-210-305	DRW 7 ST 22 KOHM 10%
R 6368	8790-050-035	ESTR.SK10-A 1 KOHM LIN
SI6301 ⚠	8315-622-003	FS.3,15 A/T L 250V
T 3606	8302-201-549	TRANS.BC 549 B
T 3607	8302-201-549	TRANS.BC 549 B
T 3622	8302-201-579	TRANS.BC 558 B
T 3627	8302-201-549	TRANS.BC 549 B
T 3632	8302-201-549	TRANS.BC 549 B
T 3642	8302-201-553	TRANS.BC 548 B
T 3644	8302-201-553	TRANS.BC 548 B
T 3662	8302-201-549	TRANS.BC 549 B
T 6332	8302-805-050	TRANS.IRF PC 50
TR6330 ⚠	29201-325.97	SPERRWANDLERTRAFO KPL
TR6351 ⚠	09030-315.01	NETZTRAFO

ÄNDERUNGEN VORBEHALTEN

ALTERATIONS RESERVED

Änderungen vorbehalten
Subject to alteration

Printed in Germany
VK 2231 1294

Service Manual Sach-Nr. 72010-015.50
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